

Jeopardy Assessment
for the Proposed Incidental Taking Authorization
of the Butler's Garter Snake

Port Lateral Pipeline Project
Washington and Ozaukee Counties, Wisconsin

Background

The state-threatened Butler's gartersnake is the smallest of the five Wisconsin gartersnake species. Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid to late summer. The Butler's garter snake is a colonial species that is restricted to several southeastern counties in Wisconsin. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frostline and where adequate moisture exists).

The Butler's gartersnake was listed as a state-threatened species in 1997 for two primary reasons: extensive habitat loss within its very limited range; intergradation with a similar species, the eastern plains gartersnake *Thamnophis radix*. Habitat loss leads the list of threats. In addition, habitat fragmentation has caused populations to become isolated, potentially compromising their genetic integrity. Additional habitat losses will further hamper recovery efforts unless enough sites can be identified and preserved to perpetuate this species.

Intergradation with the plains gartersnake likely continues at the periphery of the Butler's known range, particularly at the southern and western edges of its range, but is expected to lessen as habitat fragmentation isolates populations. This will, in turn, create other management challenges in dealing with the long-term survival of the Butler's gartersnake.

Surveys and monitoring since the snake's listing in 1997 reveal that Butler's can occur in large numbers on relatively small sites (i.e. 400+ snakes detected on a 20-acre site with less than 50% suitable [open canopy] habitat). At sites where Butler's have been well surveyed, their populations tend to show a healthy age-class structure, indicating that regular recruitment is occurring at those locations. Surveys have also demonstrated that Butler's can occur on disturbed and degraded sites.

Range limits for the Butler's gartersnake may be further refined as additional information on genetics and taxonomy becomes available. Changes in range limits may necessitate re-assessing jeopardy policies, by either relaxing or tightening allowable take.

In summary, the Butler's gartersnake is a fast-maturing species with potentially high annual recruitment. The habitats required for this species have and are continuing to be lost due to development pressures within southeastern Wisconsin. Relatively large populations can potentially be sustained on relatively small sites (under 20 acres), which may or may not be degraded, but as these sites become further isolated, their populations may suffer from genetic stagnation. The long-term future of this species remains unclear and the protection of existing habitat seems essential to achieving stability and recovery.

Jeopardy Assessment

The proposed Jackson to Port Washington natural gas pipeline will result in limited and temporary disturbance to Butler's gartersnake habitat within several wetlands and uplands along its proposed installation corridor. Although Butler's gartersnakes have not been formally documented in most of the areas identified as supporting suitable Butler's habitat areas, their presence is likely in a number of these sites due to their proximity to known Butler's populations. Incidental Take is presumed

because patches of suitable habitat where snakes may exist will be disturbed to accomplish the proposed work. However take of individual snakes is expected to be extremely low and the disturbed habitats will be restored to the same or better quality following completion of the project. To minimize the take of this snake, we are requiring the conservation measures below.

The department has determined that the proposed project is not likely to jeopardize the continued existence or recovery of the state population of these snakes or the whole plant-animal community of which they are a part. The benefits to public welfare justify this activity. The basis for this assessment is that the temporary habitat disturbance is unlikely to jeopardize the population along the corridor and the take of individual snakes is expected to be extremely low.

Conservation Measures

The following conservation measures will be adhered to for the purpose of minimizing any adverse effect on the state threatened Butler's Garter snake.

1. Existing habitats must be restored to the same or better natural habitat conditions following the transmission line work. Any needed reseeding along the installation corridor should be done as soon as conditions permit in order to establish vegetation as quickly as possible.
2. All erosion and sediment control measures and other conditions required by applicable DNR permits must be strictly adhered. Erosion control structures must be removed as soon as enough vegetation has been established to effectively control erosion.